SEQUENCE LISTING

<110> SHELLEY, CARL SIMON
FAROKHZAD, OMID C.

<120> METHODS FOR DIAGNOSING AND TREATING TUMORS AND SUPPRESSING CD PROMOTERS

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<151> 2002-09-23

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<213> Homo sapiens sialophorin

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            20                  25                  30

Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser
        35                  40                  45

Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala
    50                  55                  60

Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser
65                  70                  75                  80

Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln
                85                  90                  95

Glu Val Ser Ile Lys Met Ser Ser Val Pro Gln Glu Thr Pro His Ala
            100                 105                 110
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Thr Ser His Pro Ala Val Pro Ile Thr Ala Asn Ser Leu Gly Ser His
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Thr Val Thr Gly Gly Thr Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser
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Arg Thr Ser Gly Ala Pro Val Thr Thr Ala Ala Ser Ser Leu Glu Thr
145                 150                 155                 160

Ser Arg Gly Thr Ser Gly Pro Pro Leu Thr Met Ala Thr Val Ser Leu
                165                 170                 175

Glu Thr Ser Lys Gly Thr Ser Gly Pro Pro Val Thr Met Ala Thr Asp
            180                 185                 190

Ser Leu Glu Thr Ser Thr Gly Thr Thr Gly Pro Pro Val Thr Met Thr
        195                 200                 205

Thr Gly Ser Leu Glu Pro Ser Ser Gly Ala Ser Gly Pro Gln Val Ser
    210                 215                 220

Ser Val Lys Leu Ser Thr Met Met Ser Pro Thr Thr Ser Thr Asn Ala
225                 230                 235                 240

Ser Thr Val Pro Phe Arg Asn Pro Asp Glu Asn Ser Arg Gly Met Leu
                245                 250                 255

Pro Val Ala Val Leu Val Ala Leu Leu Ala Val Ile Val Leu Val Ala
            260                 265                 270

Leu Leu Leu Leu Trp Arg Arg Arg Gln Lys Arg Arg Thr Gly Ala Leu
        275                 280                 285

Val Leu Ser Arg Gly Gly Lys Arg Asn Gly Val Val Asp Ala Trp Ala
    290                 295                 300

Gly Pro Ala Gln Val Pro Glu Glu Gly Ala Val Thr Val Thr Val Gly
305                 310                 315                 320

Gly Ser Gly Gly Asp Lys Gly Ser Gly Phe Pro Asp Gly Glu Gly Ser
                325                 330                 335

Ser Arg Arg Pro Thr Leu Thr Thr Phe Phe Gly Arg Arg Lys Ser Arg
            340                 345                 350

Gln Gly Ser Leu Ala Met Glu Glu Leu Lys Ser Gly Ser Gly Pro Ser
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Leu Lys Gly Glu Glu Glu Pro Leu Val Ala Ser Glu Asp Gly Ala Val
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Asp Ala Pro Ala Pro Asp Glu Pro Glu Gly Gly Asp Gly Ala Ala Pro
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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 4

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Ala Leu Gly Ser Thr Thr Ala Val Gln Thr Pro Thr Ser Gly Glu Pro
            20                  25                  30

Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser
        35                  40                  45

Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala
    50                  55                  60

Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser
65                  70                  75                  80

Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln
                85                  90                  95

Glu Val Ser Ile Lys Met Ser Ser Val Pro Gln Glu Thr Pro His Ala
            100                 105                 110

Thr Ser His Pro Ala Val Pro Ile Thr Ala Asn Ser Leu Gly Ser His
        115                 120                 125

Thr Val Thr Gly Gly Thr Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser
    130                 135                 140

Arg Thr Ser Gly Ala Pro Val Thr Thr Ala Ala Ser Ser Leu Glu Thr
145                 150                 155                 160

Ser Arg Gly Thr Ser Gly Pro Pro Leu Thr Met Ala Thr Val Ser Leu
                165                 170                 175

Glu Thr Ser Lys Gly Thr Ser Gly Pro Pro Val Thr Met Ala Thr Asp
            180                 185                 190

Ser Leu Glu Thr Ser Thr Gly Thr Thr Gly Pro Pro Val Thr Met Thr
        195                 200                 205

Thr Gly Ser Leu Glu Pro Ser Ser Gly Ala Ser Gly Pro Gln Val Ser
    210                 215                 220

Ser Val Lys Leu Ser Thr Met Met Ser Pro Thr Thr Ser Thr Asn Ala
225                 230                 235                 240

Ser Thr Val Pro Phe Arg Asn Pro Asp Glu Asn Ser Arg Gly Met Leu
                245                 250                 255

Pro Val Ala Val Leu Val Ala Leu Leu Ala Val Ile Val Leu Val Ala
            260                 265                 270
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Leu Leu Leu Leu Trp Arg Arg Arg Gln Lys Arg Arg Thr Gly Ala Leu
        275                 280                 285

Val Leu Ser Arg Gly Gly Lys Arg Asn Gly Val Val Asp Ala Trp Ala
    290                 295                 300

Gly Pro Ala Gln Val Pro Glu Glu Gly Ala Val Thr Val Thr Val Gly
305                 310                 315                 320

Gly Ser Gly Gly Asp Lys Gly Ser Gly Phe Pro Asp Gly Glu Gly Ser
                325                 330                 335

Ser Arg Arg Pro Thr Leu Thr Thr Phe Phe Gly Arg Arg Lys Ser Arg
            340                 345                 350

Gln Gly Ser Leu Ala Met Glu Glu Leu Lys Ser Gly Ser Gly Pro Ser
        355                 360                 365

Leu Lys Gly Glu Glu Glu Pro Leu Val Ala Ser Glu Asp Gly Ala Val
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Asp Ala Pro Ala Pro Asp Glu Pro Glu Gly Gly Asp Gly Ala Ala Pro
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<213> Human leukosialin

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<212> PRT
<213> Homo sapiens leukosialin

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Ala Leu Gly Ser Thr Thr Ala Val Gln Thr Pro Thr Ser Gly Glu Pro
            20                  25                  30

Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser
        35                  40                  45

Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala
    50                  55                  60

Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser
65                  70                  75                  80

Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln
                85                  90                  95
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Glu Val Ser Ile Lys Met Ser Ser Val Pro Gln Glu Thr Pro His Ala
            100                 105                 110

Thr Ser His Pro Ala Val Pro Ile Thr Ala Asn Ser Leu Gly Ser His
        115                 120                 125

Thr Val Thr Gly Gly Thr Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser
    130                 135                 140

Arg Thr Ser Gly Ala Pro Val Thr Thr Ala Ala Ser Ser Leu Glu Thr
145                 150                 155                 160

Ser Arg Gly Thr Ser Gly Pro Pro Leu Thr Met Ala Thr Val Ser Leu
                165                 170                 175

Glu Thr Ser Lys Gly Thr Ser Gly Pro Pro Val Thr Met Ala Thr Asp
            180                 185                 190

Ser Leu Glu Thr Ser Thr Gly Thr Thr Gly Pro Pro Val Thr Met Thr
        195                 200                 205

Thr Gly Ser Leu Glu Pro Ser Ser Gly Ala Ser Gly Pro Gln Val Ser
    210                 215                 220

Ser Val Lys Leu Ser Thr Met Met Ser Pro Thr Thr Ser Thr Asn Ala
225                 230                 235                 240

Ser Thr Val Pro Phe Arg Asn Pro Asp Glu Asn Ser Arg Gly Met Leu
                245                 250                 255

Pro Val Ala Val Leu Val Ala Leu Leu Ala Val Ile Val Leu Val Ala
            260                 265                 270

Leu Leu Leu Leu Trp Arg Arg Arg Gln Lys Arg Arg Thr Gly Ala Leu
        275                 280                 285

Val Leu Ser Arg Gly Gly Lys Arg Asn Gly Val Val Asp Ala Trp Ala
    290                 295                 300

Gly Pro Ala Gln Val Pro Glu Glu Gly Ala Val Thr Val Thr Val Gly
305                 310                 315                 320

Gly Ser Gly Gly Asp Lys Gly Ser Gly Phe Pro Asp Gly Glu Gly Ser
                325                 330                 335

Ser Arg Arg Pro Thr Leu Thr Thr Phe Phe Gly Arg Arg Lys Ser Arg
            340                 345                 350

Gln Gly Ser Leu Ala Met Glu Glu Leu Lys Ser Gly Ser Gly Pro Ser
        355                 360                 365

Leu Lys Gly Glu Glu Glu Pro Leu Val Ala Ser Glu Asp Gly Ala Val
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Asp Ala Pro Ala Pro Asp Glu Pro Glu Gly Gly Asp Gly Ala Ala Pro
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<212> DNA

<213> Homo spaiens leukosialin

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<211> 400
<212> PRT
<213> Homo sapiens leukosialin

<400> 8

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Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser
        35                  40                  45

Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala
    50                  55                  60

Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser
65                  70                  75                  80

Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln
                85                  90                  95

Glu Val Ser Ile Lys Met Ser Ser Val Pro Gln Glu Thr Pro His Ala
            100                 105                 110

Thr Ser His Pro Ala Val Pro Ile Thr Ala Asn Ser Leu Gly Ser His
        115                 120                 125

Thr Val Thr Gly Gly Thr Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser
    130                 135                 140

Arg Thr Ser Gly Ala Pro Val Thr Thr Ala Ala Ser Ser Leu Glu Thr
145                 150                 155                 160

Ser Arg Gly Thr Ser Gly Pro Pro Leu Thr Met Ala Thr Val Ser Leu
                165                 170                 175
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Glu Thr Ser Lys Gly Thr Ser Gly Pro Pro Val Thr Met Ala Thr Asp
            180                 185                 190

Ser Leu Glu Thr Ser Thr Gly Thr Thr Gly Pro Pro Val Thr Met Thr
        195                 200                 205

Thr Gly Ser Leu Glu Pro Ser Ser Gly Ala Ser Gly Pro Gln Val Ser
    210                 215                 220

Ser Val Lys Leu Ser Thr Met Met Ser Pro Thr Thr Ser Thr Asn Ala
225                 230                 235                 240

Ser Thr Val Pro Phe Arg Asn Pro Asp Glu Asn Ser Arg Gly Met Leu
                245                 250                 255

Pro Val Ala Val Leu Val Ala Leu Leu Ala Val Ile Val Leu Val Ala
            260                 265                 270

Leu Leu Leu Leu Trp Arg Arg Arg Gln Lys Arg Arg Thr Gly Ala Leu
        275                 280                 285

Val Leu Ser Arg Gly Gly Lys Arg Asn Gly Val Val Asp Ala Trp Ala
    290                 295                 300

Gly Pro Ala Gln Val Pro Glu Glu Gly Ala Val Thr Val Thr Val Gly
305                 310                 315                 320

Gly Ser Gly Gly Asp Lys Gly Ser Gly Phe Pro Asp Gly Glu Gly Ser
                325                 330                 335

Ser Arg Arg Pro Thr Leu Thr Thr Phe Phe Gly Arg Arg Lys Ser Arg
            340                 345                 350

Gln Gly Ser Leu Ala Met Glu Glu Leu Lys Ser Gly Ser Gly Pro Ser
        355                 360                 365

Leu Lys Gly Glu Glu Glu Pro Leu Val Ala Ser Glu Asp Gly Ala Val
    370                 375                 380

Asp Ala Pro Ala Pro Asp Glu Pro Glu Gly Gly Asp Gly Ala Ala Pro
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<213> Homo sapiens leukosialin (CD43)

<400> 9

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<211> 400
<212> PRT
<213> Homo sapiens leukosialin (CD43)

<400> 10

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Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser
        35                  40                  45

Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala
    50                  55                  60

Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser
65                  70                  75                  80

Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln
                85                  90                  95

Glu Val Ser Ile Lys Met Ser Ser Val Pro Gln Glu Thr Pro His Ala
            100                 105                 110
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Thr Ser His Pro Ala Val Pro Ile Thr Ala Asn Ser Leu Gly Ser His
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Thr Val Thr Gly Gly Thr Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser
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Arg Thr Ser Gly Ala Pro Val Thr Thr Ala Ala Ser Ser Leu Glu Thr
145                 150                 155                 160

Ser Arg Gly Thr Ser Gly Pro Pro Leu Thr Met Ala Thr Val Ser Leu
                165                 170                 175

Glu Thr Ser Lys Gly Thr Ser Gly Pro Pro Val Thr Met Ala Thr Asp
            180                 185                 190

Ser Leu Glu Thr Ser Thr Gly Thr Thr Gly Pro Pro Val Thr Met Thr
        195                 200                 205

Thr Gly Ser Leu Glu Pro Ser Ser Gly Ala Ser Gly Pro Gln Val Ser
    210                 215                 220

Ser Val Lys Leu Ser Thr Met Met Ser Pro Thr Thr Ser Thr Asn Ala
225                 230                 235                 240

Ser Thr Val Pro Phe Arg Asn Pro Asp Glu Asn Ser Arg Gly Met Leu
                245                 250                 255

Pro Val Ala Val Leu Val Ala Leu Leu Ala Val Ile Val Leu Val Ala
            260                 265                 270

Leu Leu Leu Leu Trp Arg Arg Arg Gln Lys Arg Arg Thr Gly Ala Leu
        275                 280                 285

Val Leu Ser Arg Gly Gly Lys Arg Asn Gly Val Val Asp Ala Trp Ala
    290                 295                 300

Gly Pro Ala Gln Val Pro Glu Glu Gly Ala Val Thr Val Thr Val Gly
305                 310                 315                 320

Gly Ser Gly Gly Asp Lys Gly Ser Gly Phe Pro Asp Gly Glu Gly Ser
                325                 330                 335

Ser Arg Arg Pro Thr Leu Thr Thr Phe Phe Gly Arg Arg Lys Ser Arg
            340                 345                 350

Gln Gly Ser Leu Ala Met Glu Glu Leu Lys Ser Gly Ser Gly Pro Ser
        355                 360                 365

Leu Lys Gly Glu Glu Glu Pro Leu Val Ala Ser Glu Asp Gly Ala Val
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Asp Ala Pro Ala Pro Asp Glu Pro Glu Gly Gly Asp Gly Ala Ala Pro
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<211> 1879
<212> DNA
<213> Homo sapiens sialophorin (CD43)

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<210> 12
<211> 400
<212> PRT
<213> Homo sapiens sialophorin (CD43)

<400> 12

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Ala Leu Gly Ser Thr Thr Ala Val Gln Thr Pro Thr Ser Gly Glu Pro
            20                  25                  30

Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser
        35                  40                  45

Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala
    50                  55                  60

Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser
65                  70                  75                  80

Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln
                85                  90                  95

Glu Val Ser Ile Lys Met Ser Ser Val Pro Gln Glu Thr Pro His Ala
            100                 105                 110

Thr Ser His Pro Ala Val Pro Ile Thr Ala Asn Ser Leu Gly Ser His
        115                 120                 125

Thr Val Thr Gly Gly Thr Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser
    130                 135                 140

Arg Thr Ser Gly Ala Pro Val Thr Thr Ala Ala Ser Ser Leu Glu Thr
145                 150                 155                 160

Ser Arg Gly Thr Ser Gly Pro Pro Leu Thr Met Ala Thr Val Ser Leu
                165                 170                 175

Glu Thr Ser Lys Gly Thr Ser Gly Pro Pro Val Thr Met Ala Thr Asp
            180                 185                 190

Ser Leu Glu Thr Ser Thr Gly Thr Thr Gly Pro Pro Val Thr Met Thr
        195                 200                 205

Thr Gly Ser Leu Glu Pro Ser Ser Gly Ala Ser Gly Pro Gln Val Ser
    210                 215                 220

Ser Val Lys Leu Ser Thr Met Met Ser Pro Thr Thr Ser Thr Asn Ala
225                 230                 235                 240

Ser Thr Val Pro Phe Arg Asn Pro Asp Glu Asn Ser Arg Gly Met Leu
                245                 250                 255

Pro Val Ala Val Leu Val Ala Leu Leu Ala Val Ile Val Leu Val Ala
            260                 265                 270
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Leu Leu Leu Leu Trp Arg Arg Arg Gln Lys Arg Arg Thr Gly Ala Leu
        275                 280                 285

Val Leu Ser Arg Gly Gly Lys Arg Asn Gly Val Val Asp Ala Trp Ala
    290                 295                 300

Gly Pro Ala Gln Val Pro Glu Glu Gly Ala Val Thr Val Thr Val Gly
305                 310                 315                 320

Gly Ser Gly Gly Asp Lys Gly Ser Gly Phe Pro Asp Gly Glu Gly Ser
                325                 330                 335

Ser Arg Arg Pro Thr Leu Thr Thr Phe Phe Gly Arg Arg Lys Ser Arg
            340                 345                 350

Gln Gly Ser Leu Ala Met Glu Glu Leu Lys Ser Gly Ser Gly Pro Ser
        355                 360                 365

Leu Lys Gly Glu Glu Glu Pro Leu Val Ala Ser Glu Asp Gly Ala Val
    370                 375                 380

Asp Ala Pro Ala Pro Asp Glu Pro Glu Gly Gly Asp Gly Ala Ala Pro
385                 390                 395                 400
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<213> Homo sapiens sialophorin (CD43)

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agtgcctgcg tgtgtccact cgtgggtgtg gtttgtgtgc aagagctgag gatttggcga 3840

tgcttgggag gggtagttgt gggtacagac ggtgtggggg tgggaagtgg tgcagagact 3900

gaagagggtc aacctgggca tgggggacac agggactgct gagaacgtgc gtgtcatctt 3960

tgctctgatg gggtggacat agcagaaaat ctaactctgt ctgtagcccc atacagaatg 4020

ccagggtgag cacagtggct ggtgccttta atcccagcac tttggaaagt tgaggcagga 4080

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gcctgggcag gagatggggg aaagggtcag gtgggggatg ggctcgtgca gtgggagagg 4860

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acccagacta gagggcagtg gtgcaatcac agctcaccac agcctcaacc tcctgggcct 6360

cccaagtagc tgcgatcaca ggtgtgcacc aacatgccca gctaattttt tttttaattt 6420

ttaatttgta cagacagggt cttgctgtgt tgcccaggct ggtctcgaac tcctgggctc 6480

aagtggtcct cccacctaag ctt 6503

<210> 14
<211> 400
<212> PRT
<213> Homo sapiens sialophorin (CD43)

<400> 14

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Met Ala Thr Leu Leu Leu Leu Leu Gly Val Leu Val Val Ser Pro Asp
1               5                  10                  15

Ala Leu Gly Ser Thr Thr Ala Val Gln Thr Pro Thr Ser Gly Glu Pro
            20                  25                  30

Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser
        35                  40                  45

Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala
    50                  55                  60

Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser
65                  70                  75                  80

Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln
                85                  90                  95

Glu Val Ser Ile Lys Met Ser Ser Val Pro Gln Glu Thr Pro His Ala
            100                 105                 110

Thr Ser His Pro Ala Val Pro Ile Thr Ala Asn Ser Leu Gly Ser His
        115                 120                 125

Thr Val Thr Gly Gly Thr Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser
    130                 135                 140

Arg Thr Ser Gly Ala Pro Val Thr Thr Ala Ala Ser Ser Leu Glu Thr
145                 150                 155                 160

Ser Arg Gly Thr Ser Gly Pro Pro Leu Thr Met Ala Thr Val Ser Leu
                165                 170                 175

Glu Thr Ser Lys Gly Thr Ser Gly Pro Pro Val Thr Met Ala Thr Asp
            180                 185                 190

Ser Leu Glu Thr Ser Thr Gly Thr Thr Gly Pro Pro Val Thr Met Thr
        195                 200                 205

Thr Gly Ser Leu Glu Pro Ser Ser Gly Ala Ser Gly Pro Gln Val Ser
    210                 215                 220

Ser Val Lys Leu Ser Thr Met Met Ser Pro Thr Thr Ser Thr Asn Ala
225                 230                 235                 240

Ser Thr Val Pro Phe Arg Asn Pro Asp Glu Asn Ser Arg Gly Met Leu
                245                 250                 255

Pro Val Ala Val Leu Val Ala Leu Leu Ala Val Ile Val Leu Val Ala
            260                 265                 270
```

```
Leu Leu Leu Leu Trp Arg Arg Arg Gln Lys Arg Arg Thr Gly Ala Leu
        275                 280                 285

Val Leu Ser Arg Gly Gly Lys Arg Asn Gly Val Val Asp Ala Trp Ala
    290                 295                 300

Gly Pro Ala Gln Val Pro Glu Glu Gly Ala Val Thr Val Thr Val Gly
305                 310                 315                 320

Gly Ser Gly Gly Asp Lys Gly Ser Gly Phe Pro Asp Gly Glu Gly Ser
                325                 330                 335

Ser Arg Arg Pro Thr Leu Thr Thr Phe Phe Gly Arg Arg Lys Ser Arg
            340                 345                 350

Gln Gly Ser Leu Ala Met Glu Glu Leu Lys Ser Gly Ser Gly Pro Ser
        355                 360                 365

Leu Lys Gly Glu Glu Glu Pro Leu Val Ala Ser Glu Asp Gly Ala Val
    370                 375                 380

Asp Ala Pro Ala Pro Asp Glu Pro Glu Gly Gly Asp Gly Ala Ala Pro
385                 390                 395                 400
```

<210> 15
<211> 2745
<212> DNA
<213> Homo sapiens heterogeneous nuclear ribonucleoprotein K

<400> 15

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cttcagttct gctctgcaag gatatataat aactgattgg tgtgcccgtt taataaaaga    120

atatggaaac tgaacagcca gaagaaacct tccctaacac tgaaaccaat ggtgaatttg    180

gtaaacgccc tgcagaagat atggaagagg aacaagcatt taaaagatct agaaacactg    240

atgagatggt tgaattacgc attctgcttc agagcaagaa tgctggggca gtgattggaa    300

aaggaggcaa gaatattaag gctctccgta cagactacaa tgccagtgtt tcagtcccag    360

acagcagtgg ccccgagcgc atattgagta tcagtgctga tattgaaaca attggagaaa    420

ttctgaagaa aatcatccct accttggaag agggcctgca gttgccatca cccactgcaa    480

ccagccagct cccgctcgaa tctgatgctg tggaatgctt aaattaccaa cactataaag    540

gaagtgactt tgactgcgag ttgaggctgt tgattcatca gagtctagca ggaggaatta    600

ttggggtcaa aggtgctaaa atcaaagaac ttcgagagaa cactcaaacc accatcaagc    660

ttttccagga atgctgtcct cattccactg acagagttgt tcttattgga ggaaaacccg    720

atagggttgt agagtgcata aagatcatcc ttgatcttat atctgagtct cccatcaaag    780

gacgtgcaca gccttatgat cccaattttt acgatgaaac ctatgattat ggtggtttta    840

caatgatgtt tgatgaccgt cgcggacgcc cagtgggatt tcccatgcgg ggaagaggtg    900
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atgatgatat gagccctcgt cgaggaccac ctccccctcc tcccggacga ggcggccggg 1020

gtggtagcag agctcggaat cttcctcttc ctccaccacc accacctaga gggggagacc 1080

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cgatcaaaat tgatgagcct ttagaaggat ccgaagatcg gatcattacc attacaggaa 1440

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gttttatgat ttttaaaata aatttagtga acctattttt ggtggtcatt tttttttaa 2040

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atgcttgccc ctacttttca acaattttct atgttagttg tgaagaacta aggtggggag 2340

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tattagataa tttctcacct atagacttaa actgtcaatt tgctctagtg tcttattagt 2520

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tagttaaaat tcacttccaa ataaataaaa cacccatgat gctag 2745

<210> 16
<211> 463
<212> PRT
<213> Homo sapiens heterogeneous nuclear ribonucleoprotein complex K

<400> 16

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Met Glu Thr Glu Gln Pro Glu Glu Thr Phe Pro Asn Thr Glu Thr Asn
1               5                  10                  15

Gly Glu Phe Gly Lys Arg Pro Ala Glu Asp Met Glu Glu Glu Gln Ala
            20                  25                  30

Phe Lys Arg Ser Arg Asn Thr Asp Glu Met Val Glu Leu Arg Ile Leu
        35                  40                  45

Leu Gln Ser Lys Asn Ala Gly Ala Val Ile Gly Lys Gly Gly Lys Asn
    50                  55                  60

Ile Lys Ala Leu Arg Thr Asp Tyr Asn Ala Ser Val Ser Val Pro Asp
65                  70                  75                  80

Ser Ser Gly Pro Glu Arg Ile Leu Ser Ile Ser Ala Asp Ile Glu Thr
                85                  90                  95

Ile Gly Glu Ile Leu Lys Lys Ile Ile Pro Thr Leu Glu Glu Gly Leu
            100                 105                 110

Gln Leu Pro Ser Pro Thr Ala Thr Ser Gln Leu Pro Leu Glu Ser Asp
        115                 120                 125

Ala Val Glu Cys Leu Asn Tyr Gln His Tyr Lys Gly Ser Asp Phe Asp
    130                 135                 140

Cys Glu Leu Arg Leu Leu Ile His Gln Ser Leu Ala Gly Gly Ile Ile
145                 150                 155                 160

Gly Val Lys Gly Ala Lys Ile Lys Glu Leu Arg Glu Asn Thr Gln Thr
                165                 170                 175

Thr Ile Lys Leu Phe Gln Glu Cys Cys Pro His Ser Thr Asp Arg Val
            180                 185                 190

Val Leu Ile Gly Gly Lys Pro Asp Arg Val Val Glu Cys Ile Lys Ile
        195                 200                 205

Ile Leu Asp Leu Ile Ser Glu Ser Pro Ile Lys Gly Arg Ala Gln Pro
    210                 215                 220

Tyr Asp Pro Asn Phe Tyr Asp Glu Thr Tyr Asp Tyr Gly Gly Phe Thr
225                 230                 235                 240

Met Met Phe Asp Asp Arg Arg Gly Arg Pro Val Gly Phe Pro Met Arg
                245                 250                 255

Gly Arg Gly Gly Phe Asp Arg Met Pro Pro Gly Arg Gly Gly Arg Pro
            260                 265                 270

Met Pro Pro Ser Arg Arg Asp Tyr Asp Asp Met Ser Pro Arg Arg Gly
        275                 280                 285
```

```
Pro Pro Pro Pro Pro Pro Gly Arg Gly Gly Arg Gly Gly Ser Arg Ala
    290                 295                 300

Arg Asn Leu Pro Leu Pro Pro Pro Pro Pro Pro Arg Gly Gly Asp Leu
305                 310                 315                 320

Met Ala Tyr Asp Arg Arg Gly Arg Pro Gly Asp Arg Tyr Asp Gly Met
                325                 330                 335

Val Gly Phe Ser Ala Asp Glu Thr Trp Asp Ser Ala Ile Asp Thr Trp
            340                 345                 350

Ser Pro Ser Glu Trp Gln Met Ala Tyr Glu Pro Gln Gly Gly Ser Gly
        355                 360                 365

Tyr Asp Tyr Ser Tyr Ala Gly Gly Arg Gly Ser Tyr Gly Asp Leu Gly
    370                 375                 380

Gly Pro Ile Ile Thr Thr Gln Val Thr Ile Pro Lys Asp Leu Ala Gly
385                 390                 395                 400

Ser Ile Ile Gly Lys Gly Gly Gln Arg Ile Lys Gln Ile Arg His Glu
                405                 410                 415

Ser Gly Ala Ser Ile Lys Ile Asp Glu Pro Leu Glu Gly Ser Glu Asp
            420                 425                 430

Arg Ile Ile Thr Ile Thr Gly Thr Gln Asp Gln Ile Gln Asn Ala Gln
        435                 440                 445

Tyr Leu Leu Gln Asn Ser Val Lys Gln Tyr Ser Gly Lys Phe Phe
    450                 455                 460
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<210> 17
<211> 1144
<212> DNA
<213> Homo sapiens Pur (pur-alpha)

<400> 17

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tggggcaccc cggctcgggc tcaggctccg gcgggggcgg tggtggcggc gggggcggcg    180

gcggcagtgg cggcggcggc ggcggggccc cagggggget gcagcacgag acgcaggagc    240

tggcctccaa gcgggtggac atccagaaca agcgcttcta cctggacgtg aagcagaacg    300

ccaagggccg cttcctgaag atcgccgagg tgggcgcggg cggcaacaag agccgcctta    360

ctctctccat gtcagtggcc gtggagttcc gcgactacct gggcgacttc atcgagcact    420

acgcgcagct gggccccagc cagccgccgg acctggccca ggcgcaggac gagccgcgcc    480

gggcgctcaa aagcgagttc ctggtgcgcg agaaccgcaa gtactacatg gatctcaagg    540

agaaccagcg cggccgcttc ctgcgcatcc gccagacggt caaccggggg cctggcctgg    600

gctccacgca gggccagacc attgcgctgc ccgcgcaggg gctcatcgag ttccgtgacg    660
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gcacctcctt gactgtggac aacaagcgct tcttcttcga tgtgggctcc aacaagtacg 780

gcgtgtttat gcgagtgagc gaggtgaagc ccacctatcg caactccatc accgtgccct 840

acaaggtgtg ggccaagttc ggacacacct tctgcaagta ctcggaggag atgaagaaga 900

ttcaagagaa gcagagggag aagcgggctg cctgtgagca gcttcaccag cagcaacagc 960

agcagcagga ggagaccgcc gctgccactc tgctactgca gggtgaggaa gaaggggaag 1020

aagattgatc aaacagaatg aaacccccac acacacacac atgcatacac acacacacac 1080

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aaaa 1144

<210> 18
<211> 322
<212> PRT
<213> Homo sapiens purine-rich element binding protein A (PURA)

<400> 18

Met Ala Asp Arg Asp Ser Gly Ser Glu Gln Gly Gly Ala Ala Leu Gly
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Ser Gly Gly Ser Leu Gly His Pro Gly Ser Gly Ser Gly Ser Gly Gly
20 25 30

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly
35 40 45

Gly Ala Pro Gly Gly Leu Gln His Glu Thr Gln Glu Leu Ala Ser Lys
50 55 60

Arg Val Asp Ile Gln Asn Lys Arg Phe Tyr Leu Asp Val Lys Gln Asn
65 70 75 80

Ala Lys Gly Arg Phe Leu Lys Ile Ala Glu Val Gly Ala Gly Gly Asn
85 90 95

Lys Ser Arg Leu Thr Leu Ser Met Ser Val Ala Val Glu Phe Arg Asp
100 105 110

Tyr Leu Gly Asp Phe Ile Glu His Tyr Ala Gln Leu Gly Pro Ser Gln
115 120 125

Pro Pro Asp Leu Ala Gln Ala Gln Asp Glu Pro Arg Arg Ala Leu Lys
130 135 140

Ser Glu Phe Leu Val Arg Glu Asn Arg Lys Tyr Tyr Met Asp Leu Lys
145 150 155 160

Glu Asn Gln Arg Gly Arg Phe Leu Arg Ile Arg Gln Thr Val Asn Arg
165 170 175

Gly Pro Gly Leu Gly Ser Thr Gln Gly Gln Thr Ile Ala Leu Pro Ala
180 185 190

```
Gln Gly Leu Ile Glu Phe Arg Asp Ala Leu Ala Lys Leu Ile Asp Asp
        195                 200                 205

Tyr Gly Val Glu Glu Glu Pro Ala Glu Leu Pro Glu Gly Thr Ser Leu
    210                 215                 220

Thr Val Asp Asn Lys Arg Phe Phe Phe Asp Val Gly Ser Asn Lys Tyr
225                 230                 235                 240

Gly Val Phe Met Arg Val Ser Glu Val Lys Pro Thr Tyr Arg Asn Ser
                245                 250                 255

Ile Thr Val Pro Tyr Lys Val Trp Ala Lys Phe Gly His Thr Phe Cys
            260                 265                 270

Lys Tyr Ser Glu Glu Met Lys Lys Ile Gln Glu Lys Gln Arg Glu Lys
        275                 280                 285

Arg Ala Ala Cys Glu Gln Leu His Gln Gln Gln Gln Gln Gln Gln Glu
    290                 295                 300

Glu Thr Ala Ala Ala Thr Leu Leu Leu Gln Gly Glu Glu Glu Gly Glu
305                 310                 315                 320

Glu Asp
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<210> 19
<211> 22
<212> DNA
<213> Synthetic oligonucleotide (CD43 PyRo SS)

<400> 19
gggcccactt cctttcccct tg 22

<210> 20
<211> 16
<212> DNA
<213> Synthetic oligonucleotide (CD43 PyRo SSUB)

<220>
<221> misc_feature
<222> (9)..(10)
<223> bromouracil

<220>
<221> misc_feature
<222> (13)..(15)
<223> bromouracil

<220>
<221> misc_feature
<222> (20)..(21)
<223> bromouracil

<220>
<221> misc_feature
<222> (23)..(23)
<223> biotin

<400> 20
gggcccaccc ccccgb 16

<210> 21
<211> 22
<212> DNA
<213> Synthetic oligonucleotide (CD43 Mut-11)

<400> 21
gggcccactt ccttcatata tg 22

<210> 22
<211> 20
<212> DNA
<213> Synthetic oligonucleotide (NS-SS)

<400> 22
gagttagctc actcattagg 20

<210> 23
<211> 21
<212> DNA
<213> Synthetic oligonucleotide(LUC-2)

<400> 23
atagccttat gcagttgctc t 21

<210> 24
<211> 39
<212> DNA
<213> Synthetic oligonucleotide (GeneRacer RNA Oligo)

<220>
<221> misc_feature
<222> (5)..(5)
<223> bromouracil

<220>
<221> misc_feature
<222> (21)..(21)
<223> bromouracil

<220>
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<222> (26)..(26)
<223> bromouracil

<220>
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<223> bromouracil

<220>
<221> misc_feature
<222> (39)..(39)
<223> bromouracil

<400> 24
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<210> 25
<211> 54
<212> DNA
<213> Synthetic oligonucleotide (GeneRacer Oligo dT Primer)

<400> 25
gctgtcaacg atacgctacg taacggcatg acagtgtttt ttttttttt tttt 54

<210> 26
<211> 23
<212> DNA
<213> Synthetic oligonucleotide (GeneRacer 5′ Primer)

<400> 26
cgactggagc acgaggacac tga 23

<210> 27
<211> 27
<212> DNA
<213> Synthetic oligonucleotide (GeneRacer 5′ Nested Primer)

<400> 27
ggacactgac catggactga aggagta 27

<210> 28
<211> 33
<212> DNA
<213> Synthetic oligonucleotide (LUC-4)

<400> 28
cactacggta ggctgcgaaa tgttcatact gtt 33